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# EG&G ROCKY FLATS

EG&G ROCKY FLATS, INC.  
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

MAY 10 1990

May 7, 1990

90-RF-1945

Robert M. Nelson, Jr.  
Manager  
DOE, RFO

Attn: J. R. Roeder

## ELEVATED LEVELS OF AMERICIUM AND PLUTONIUM EAST OF THE 903 PAD AREA

In response to memorandum 0526-RF-90, April 24, 1990, preliminary soil data collected in conjunction with aerial radiological survey conducted in 1989 by EG&G Energy Measurements showed elevated levels of Am in the soil east of the 903 Pad area up to 97 pCi/g. The area of concern was administratively restricted and access was allowed only through a work permit. Soil samples were collected by EG&G Rocky Flats in the restricted area at or near the six sites sampled by EG&G Energy Measurements that showed the highest Am levels to confirm their data. Samples were also collected at four additional sites in the same general area to provide additional data for the area.

Two types of soil samples were collected by EG&G Rocky Flats at each of the sites. The first type of sample follows the Rocky Flats sampling protocol that involves collecting ten subsamples within a 2 square meter area to a depth of two inches. This sample should provide a better measurement of Pu distribution within the top two inches of soil than the single grab samples collected by EG&G Energy Measurements this past summer. The second type of sample involved sampling a four square meter area with 20 subsamples to a depth of 1/8 inch. This type of sampling should provide an estimate of Pu distribution in the topmost and therefore potentially resuspendable portion of the soil profile. Each sample has been sent to Argonne Labs in Chicago for radiochemical analysis of Pu<sub>239</sub>, Am<sub>241</sub>, U isotopes, and total U. Preliminary analytical results should be available in approximately three weeks.

| DIST.        | LTR | ENCL |
|--------------|-----|------|
| OFF, F.H.    |     |      |
| J.H.         |     |      |
| KE, J.C.     |     |      |
| KAME, A.H.   |     |      |
| J.G.         |     |      |
| BA, D.W.     |     |      |
| S.L.B.       |     |      |
| IS, G.E.     |     |      |
| WIN, R.      |     |      |
| T.L.         |     |      |
| ER, E.H.     |     |      |
| J.M.         | X   |      |
| W.A.         |     |      |
| STIC, J.R.   |     |      |
| LEY, K.B.    | X   |      |
| EN, J.B.     |     |      |
| ELL, R.F.    |     |      |
| ER, G.L.     |     |      |
| ES, J.L.     |     |      |
| R.V.L.       |     |      |
| DD, T.H.     |     |      |
| QY, W.M.     |     |      |
| UVEN, D.B.   |     |      |
| ER, B.P.     |     |      |
| J.E.R.       |     |      |
| ER, D.H.     |     |      |
| VAL, G.J.    |     |      |
| IAN, L.K.    |     |      |
| RT, J.L.     |     |      |
| MAN, R.B.    |     |      |
| MAN, R.L.    |     |      |
| S.D.M.       |     |      |
| ENBERG, G.E. |     |      |
| ON, E.R.     |     |      |
| BY, R.L.     |     |      |
| ER, H.L.     |     |      |
| SQUEZ, R.N.  |     |      |
| NOT, M.B.    | X   |      |
| PER, P.F.    | X   |      |
| END, J.C.    | X   |      |
| EST, J.      | X   |      |
| RES. CONTROL | X   | X    |
| TRACT ADMIN. |     |      |

| CLASSIFICATION: |   |
|-----------------|---|
| CLASSIFIED      | X |
| IDENTIAL        |   |
| ET              |   |

THORIZED CLASSIFIER  
SIGNATURE  
5/11/90

PLY TO LTR NO.  
26-RF-90

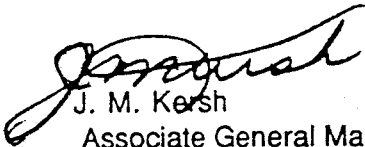
APPROVALS  
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7: [Signature]  
& TYPIST INITIALS  
FILA

R. M. Nelson, Jr.  
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The area of concern is still subject to administrative restrictions and a work permit is required for entry into the area.

Please contact me or my staff if you have any questions.



J. M. Kersh  
Associate General Manager  
Environmental Restoration/Waste Management

PPF:la

Orig. and 1 cc - R. M. Nelson, Jr

cc:

R.M. Ostmeyer, DOE-RFO  
R.J.Schassburger, DOE-RFO  
D.P.Simonson, DOE-RFO